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MAY 21 1973

PROCUREMENT SECTION
CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR UTAH

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

UTAH STATE DEPARTMENT OF NATURAL RESOURCES -- DIVISION OF WATER RIGHTS

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah State University, U.S. National
Park Service, U.S. Geological Survey, and other Federal, State,
and private organizations.

AS OF
MAY 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR UTAH

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
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WASHINGTON, D.C.

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A. W. HAMELSTROM
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SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

|||||

In Cooperation with

HUBERT C. LAMBERT
STATE ENGINEER
DIVISION OF WATER RIGHTS
UTAH STATE DEPT. OF NATURAL RESOURCES

|||||

Report prepared by

BOB L. WHALEY, Snow Survey Supervisor
SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
FEDERAL BLDG., ROOM 4012
SALT LAKE CITY, UTAH 84111

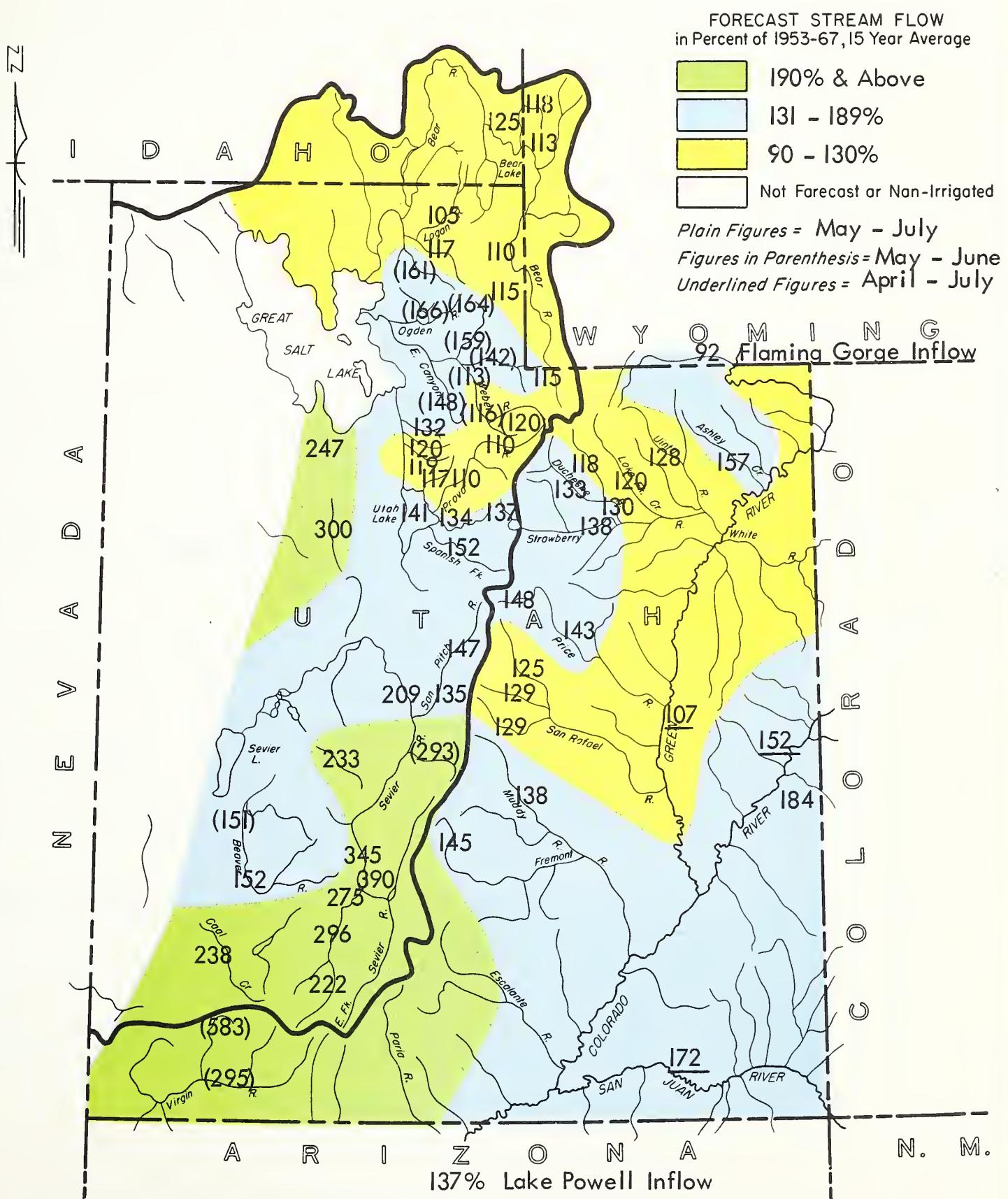
PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS

May 1, 1973

Approximate Date

A horizontal scale bar representing distance in miles. It features a thick black line with tick marks at 50, 0, 50, and 100. The text "SCALE IN MILES" is centered below the bar.



WATER SUPPLY OUTLOOK

as of

MAY 1, 1973

*
* Utah's 1973 Water Supply Outlook ranges from "near average"
* to excellent" from north to south. Snow cover varies from
* near average on the Upper Bear to 2-10 times average in *
* southern Utah. Reservoir storage is 131% of average and *
* streamflow forecasts range from 92% to 583% of average. *

Snow Cover ranged from near average on the Upper Bear River to as much as 45 times average at Long Flat snow course above New Castle in southern Utah. This course has a May 1 average of 0.4 inches of snow water but had a measurement of 18.1 inches this year on April 26. Other snow courses in southern Utah measured 8 to 10 times the May 1 average snow water content and most locations indicated better than double the average.

Northern Utah watersheds with heavy May 1 snow cover are the Ogden, Little Bear and Oquirrh Mountains near Tooele and Vernon. These areas are 2, 11, and 3 times average respectively. The east end of the Uintah Mountains on Ashley, Brush and Dry Fork Creeks received good April increases to the snow pack and are now 2 to 3 times the May 1 average.

Precipitation at mountain locations during April varied from as low as 26% of average at Duck Creek Ranger Station on the Upper Sevier to as much as 204% of average at Julius Park on the south side of the Uintahs. Other stations on the east end of the Uintahs were 183 to 186% of average.

Ogden River precipitation was 50 to 80% of average and the Wasatch Front above Salt Lake was 70 to 90% of the April average. Most other areas were near average to 60% above average for the month.

Reservoir Storage in 14 of Utah principal irrigation reservoirs is 132% of the May 1 average. The elevation of the Great Salt Lake was 4200.40 feet above mean sea level as of May 1. This is the highest level reached since July 1953 and 0.85 foot higher than a year ago and 9.05 feet above the all-time record low of October 1963, according to the U. S. Geological Survey.

Streamflow Forecasts range from 92% of average for the Inflow to Flaming Gorge to 583% of average for the Santa Clara River in southern Utah. Most tributaries of the Sevier, Virgin and Coal Creek are expected to flow better than twice average this season. Settlement Canyon Creek and Vernon Creek are expected to produce 2.5 to 3 times average flows. Mill Creek near Moab is expected to produce almost double its average during the May-July period. Peak flows in those areas are expected to be 2 to 4 times average and are expected to cause some flooding of local areas.

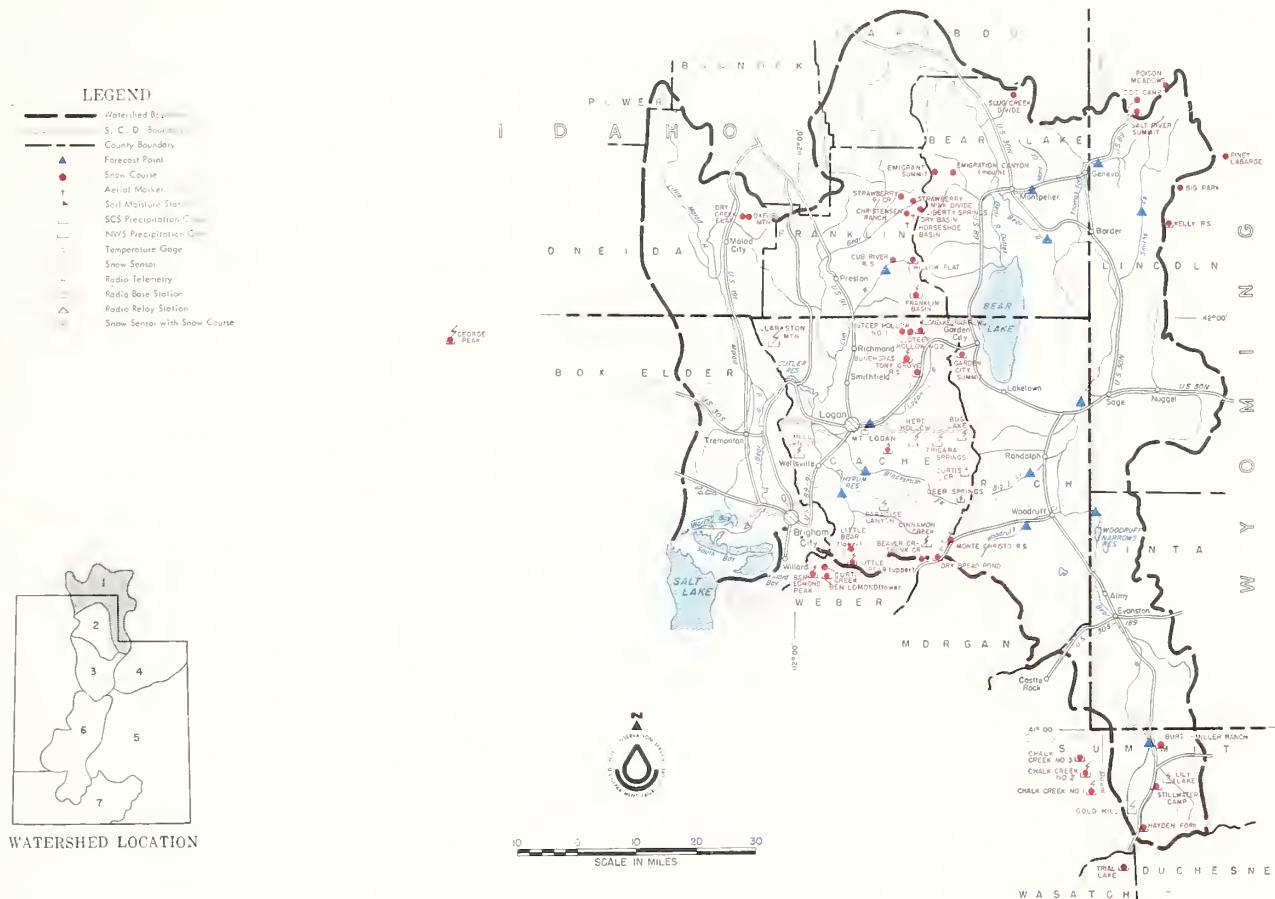
RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average+
<u>GREAT BASIN</u>					
<u>Bear River</u>	Bear Lake	1421.0	1126.6	1204.1	951.9
	Woodruff Narrows	26.5	26.5	26.5	--
<u>Beaver River</u>	Minersville (Rky Fd)	32.3	16.3	16.3	11.3
<u>Little Bear</u>	Hyrum	15.3	11.8	11.6	15.1
	Porcupine	11.3	7.3	11.0	--
<u>Ogden</u>	Causey	7.1	0.7	1.8	--
	Pineview	110.1	73.7	84.6	50.9
<u>Provo</u>	Deer Creek	149.7	125.9	129.0	97.0
<u>Sevier River</u>	Gunnison	18.2	18.1	14.4	--
	Otter Creek	52.5	43.5	39.7	31.4
	Piute	71.8	60.1	58.2	35.0
	Sevier Bridge	236.0	162.1	172.7	94.6
<u>Spanish Fork</u>	Strawberry	270.0	190.0	219.4	132.2
<u>Utah Lake</u>	Utah Lake	883.9	874.3	855.5	620.4
<u>Weber</u>	East Canyon	48.1	46.4	43.3	18.5
	Echo	73.9	54.8	65.8	51.2
<u>Lost Creek</u>	Lost Creek	20.0	13.3	12.5	--
	Rockport	60.9	38.1	23.8	27.3
	Willard Bay	193.3	175.4	176.7	--
<u>COLORADO RIVER DRAINAGE</u>					
<u>Ashley Creek</u>	Steinaker	33.3	30.7	24.6	--
<u>Colorado</u>	Blue Mesa	829.5	308.6		
	Lake Powell	25002.0	11251.0	13224.0	--
<u>Green</u>	Flaming Gorge	3749.0	3063.0	2728.0	--
<u>Lake Fork</u>	Moon Lake	35.8	20.9	15.3	17.5
<u>Price River</u>	Scofield	65.8	26.3	49.0	26.4
<u>San Rafael</u>	Huntington North	3.9	3.9	2.8	--
	Joe's Valley	54.6	39.3	42.7	--
	Mill Site	16.7	6.2	6.8	--
<u>San Juan</u>	Navajo	1696.4	1174.3	846.8	--
<u>Strawberry</u>	Starvation	165.3	121.1	127.1	--
<u>Uintah</u>	Bottle Hollow	11.3	11.0	11.0	--

WATER SUPPLY OUTLOOK

BEAR RIVER BASIN in UTAH

**UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS ABOVE AVERAGE

SNOW COVER varies from 106% of the May 1 average on the Upper Bear to 133% for the Lower Bear. An extremely heavy May 1 snow cover exists on the Little Bear River. It is about 11 times the May 1 average.

PRECIPITATION during April ranged from 60% of average at Monte Cristo R. S. to 179% at Willow Flat on the Upper Cub River.

SOIL MOISTURE is near to above average.

RESERVOIR STORAGE is above average in Bear Lake and Woodruff Narrows. Porcupine is held down to fill when peak runoff occurs.

STREAMFLOW FORECASTS range from 105% of the May-July average on the Logan River to 161% of the May-June average on the Little Bear. The maximum mean daily peak flow expected on Little Bear is between 650-900 cfs which is about twice the average for the 1953-67 period.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
<u>BEAR RIVER SYSTEM</u>				
Bear at Harer, Idaho	225	125	May-Sept	180
Bear nr Randolph	62	110	May-July	56
Bear nr Ut-Wyo State Line	115	115	May-July	100
Bear nr Woodruff	101	115	May-July	88
Big Crk nr Randolph	4.5	118	May-July	3.8
Blacksmith Fork nr Hyrum	35	117	May-July	30
Little Bear nr Paradise	30	161	May-June	18.6
Logan nr Logan (1)	90	105	May-July	86
Smith's Fork nr Border, Wyoming	122	113	Apr-Sept	175
Thomas Fork nr Ut-Wyo State Line	37	118	Apr-Sept	59
Woodruff Crk nr Woodruff, Utah	12.5	112	May-July	24
Cub River near Preston	44	101	May-Sept	59
				44.7

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
<u>Bear River</u>	Bear Lake	1421.0	1126.6	1204.1	951.9
	Woodruff Narrows	26.5	26.5	26.5	-- --
<u>Little Bear</u>	Hyrum	15.3	11.8	11.6	15.1
	Porcupine	11.3	7.3	11.0	---

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Big Creek near Randolph	50 - 90	43
Logan River near Logan	800 - 1100	911
Woodruff Creek nr Woodruff	215 - 390	220
Little Bear nr Paradise	650 - 900	439

(1) - Observed flow corrected for change in storage and diversions
 (3) - Data obtained by radio - USU-SCS cooperative sites
 b - Average of all past record within the 15-yr period, but less than 15 years.
 x - Adjacent drainage
 * - Partly estimated

BEAR RIVER BASIN

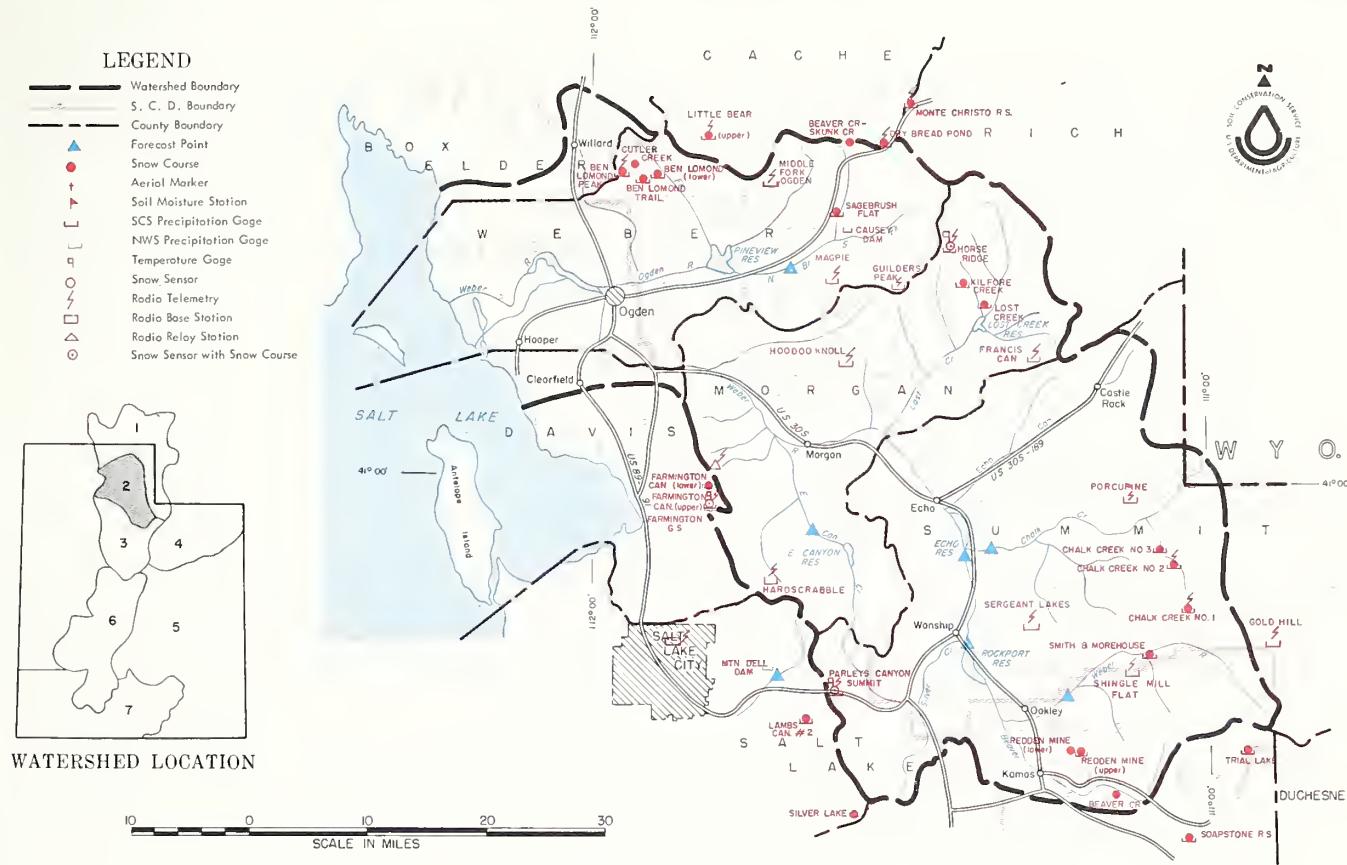
SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD	
NAME	Elevation		Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
<u>UPPER BEAR RIVER</u> <u>(Above Harer, Idaho)</u>						
Big Park x	8700	4/26	54	18.4	31.9	20.2
Burts-Miller Ranch	7900	4/25	15	5.8	0.9	1.1b
CCC Camp	7500	4/26	33	12.0	13.2	5.9
Hayden Fork	9400	4/25	43	14.5	20.5	14.7b
Kelly Ranger Station	8200	4/26	54	18.5	28.6	17.2
Monte Cristo R.S.	8960	4/26	65	27.1	37.8	24.6
Piney-LaBarge x	8820	4/27	51	19.6	33.0	- -
Poison Meadows x	8500	4/27	68	23.9	46.7	31.5*
Salt River Summit x	7900	4/26	41	14.4	21.4	11.9*
Stillwater Camp	8550	4/25	30	9.5	9.7	6.6b
Trial Lake x	9800	4/30	75	26.3	34.8	27.3
<u>LOWER BEAR RIVER</u> <u>(Below Harer, Idaho)</u>						
Beaver Crk-Skunk Crk	7150	4/26	31	13.8	4.7	3.3
Christensen Ranch	5600	4/30	0	0.0	0.0	0.0*
Cub River R.S.	5400	5/1	0	0.0	0.0	0.0*
Dry Bread Pond x	8230	4/27	51	21.4	21.4	13.9
Emigrant Summit	7350	4/26	59	23.8	32.1	21.5*
Garden City Summit	7600	4/24	46	15.5	27.5	14.7
Klondike Narrows	7400	4/24	41	16.0	23.0	13.2b
Liberty Spring	8600	4/30	95	36.9	53.0	39.4*
Little Bear (lower)	6000	4/25	31	12.9	0.0	0.5b
Little Bear (upper)	6550	4/25	42	18.1	2.8	2.3b
Monte Cristo R.S.	8960	4/26	65	27.1	37.8	24.6
Slug Creek Divide	7225	4/27	37	14.8	19.6	- -
Steep Hollow #1	8500	4/24	84	32.3	52.9	35.3b
Steep Hollow #2	7700	4/24	58	22.8	34.8	20.3b
Strawberry Creek	5800	4/30	16	5.9	0.0	2.1*
Strawberry Mink Divide	6800	4/30	48	19.8	19.2	14.1*
Tony Grove R.S.	6250	4/24	14	5.8	4.2	0.8b
Willow Flat	6100	5/1	15	5.6	0.0	3.3*

WATER SUPPLY OUTLOOK

WEBER-OGDEN WATERSHEDS in UTAH

**UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS ABOVE AVERAGE

SNOW COVER varies from 132% of the May 1 average on the Weber River to 195% on the Ogden. Slightly less water content was measured on the Weber than a year ago but about one-third more snow water content than last May 1.

PRECIPITATION ranged from 51% of average at Ben Lomond Trail to 103% of the April average at Smith and Morehouse.

SOIL MOISTURE is above average.

RESERVOIR STORAGE is generally above average. Causey Dam is being held down to assist in reduction of high peak flows expected on that stream.

STREAMFLOW FORECASTS range from 113% of the May-June average for the Inflow to Pineview Reservoir. Maximum mean daily peak flows are expected to be as follows: Chalk Creek 450-700, Lost Creek 250-400, and So. Fork of the Ogden 800-1100 cfs.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
<u>WEBER-OGDEN RIVERS</u>				
Chalk Crk. at Coalville	30	142	May-June	21
East Canyon Crk. nr Morgan (2)	16.0	148	May-June	10.8
Hardscrabble Crk. nr Porterville	15.0	142	May-June	10.6
Lost Crk. nr Croydon, Utah	13.0	159	May-June	8.2
Pineview Reservoir Inflow (3)	98	166	May-June	59
South Fork Ogden nr Huntsville	54	164	May-June	33
Rockport Reservoir Inflow (4)	110	116	May-June	95
Weber nr Coalville (5)	95	113	May-June	84
Weber nr Oakley	100	120	May-June	83

WSFB-X11-L

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Chalk Creek near Coalville	450 - 700	429
Lost Creek near Croydon	250 - 400	171
So. Fork Ogden nr Huntsville	800 - 1100	643

WSFB-X2-L

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
<u>Ogden</u>	Causey	7.1	0.7	1.9	--
	Pineview	110.1	73.7	84.6	50.9
<u>Weber</u>	East Canyon	48.1	46.4	43.3	18.5
	Echo	73.9	54.8	65.8	51.2
	Lost Creek	20.0	13.3	12.5	--
	Rockport	60.9	38.1	23.8	27.3
	Willard Bay	193.3	175.4	176.7	--

(1) - Observed flow corrected for change in storage and diversions
(2) - Inflow record as computed by U.S. Bureau of Reclamation
(3) - Data obtained by radio - USU-SCS cooperative sites
b - Average of all past records within the 15-yr period, but less than 15 years.
x - Adjacent drainage
** - Snow pillow reading cooperatively by Park City Resort
* - Partly estimated

WEBER-OGDEN WATERSHEDS

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					Average +
<u>OGDEN RIVER</u>						
Beaver Crk-Skunk Crk	7150	4/26	31	13.8	4.7	3.3
Ben Lomond (lower)	6000	4/25	56	24.2	6.1	3.7b
Ben Lomond Peak	8000	4/25	115	52.5	43.1	30.6
Ben Lomond Trail	6000	4/25	57	25.7	7.2	5.3b
Cutler Creek	6780	4/25	94	40.8	29.6	23.8b
Dry Bread Pond	8230	4/27	51	21.4	21.4	13.9
Monte Cristo R.S.	8960	4/26	65	27.1	37.8	24.6
Sagebrush Flat	6300	4/26	0	0.0	0.0	0.0b
<u>WEBER RIVER</u>						
Beaver Creek R.S.	7500	4/30	4	1.4	0.0	1.1
Chalk Creek #1	9100	4/26	77	25.6	29.6	23.2
Chalk Creek #2	7900	4/26	47	16.4	18.2	11.8
Chalk Creek #3	7500	4/26	21	7.8	0.0	1.9*
Farmington Canyon (lower)	6950	4/30	66	27.9	23.6	17.8
Farmington Canyon (upper)	8000	4/30	89	36.3	43.9	27.1b
Lamb's Canyon x	6600	4/27	31	12.8	11.5	6.3
Lost Creek Reservoir	6125	4/27	0	0.0	--	--
Park City Smt.	9300	4/27	83	34.6	44.7	--
Parley's Canyon Smt.	7500	4/27	44	17.4	15.5	10.4
Redden Mine (lower)	8500	4/26	52	19.8	16.2	14.9*
Redden Mine (upper)	9000	4/26	58	23.3	20.0	17.0
Silver Lake x	8725	4/30	72	30.0	33.6	24.2
Smith & Morehouse	7600	4/27	30	10.4	5.0	5.8
Trial Lake x	9800	4/30	75	26.3	34.8	27.3
Horse Ridge	8260	4/27	50	20.1	31.3	20.2
Kilfore Creek	7300	4/27	31	12.2	13.6	9.7b
Sargent Lakes A	8400	4/26	52	17.2	--	--

"The Conservation of Water begins with the Snow Survey"

FIRST CLASS MAIL



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SOIL CONSERVATION SERVICE
D STATES DEPARTMENT OF AGRICULTURE

PRECIPITATION (Inches)

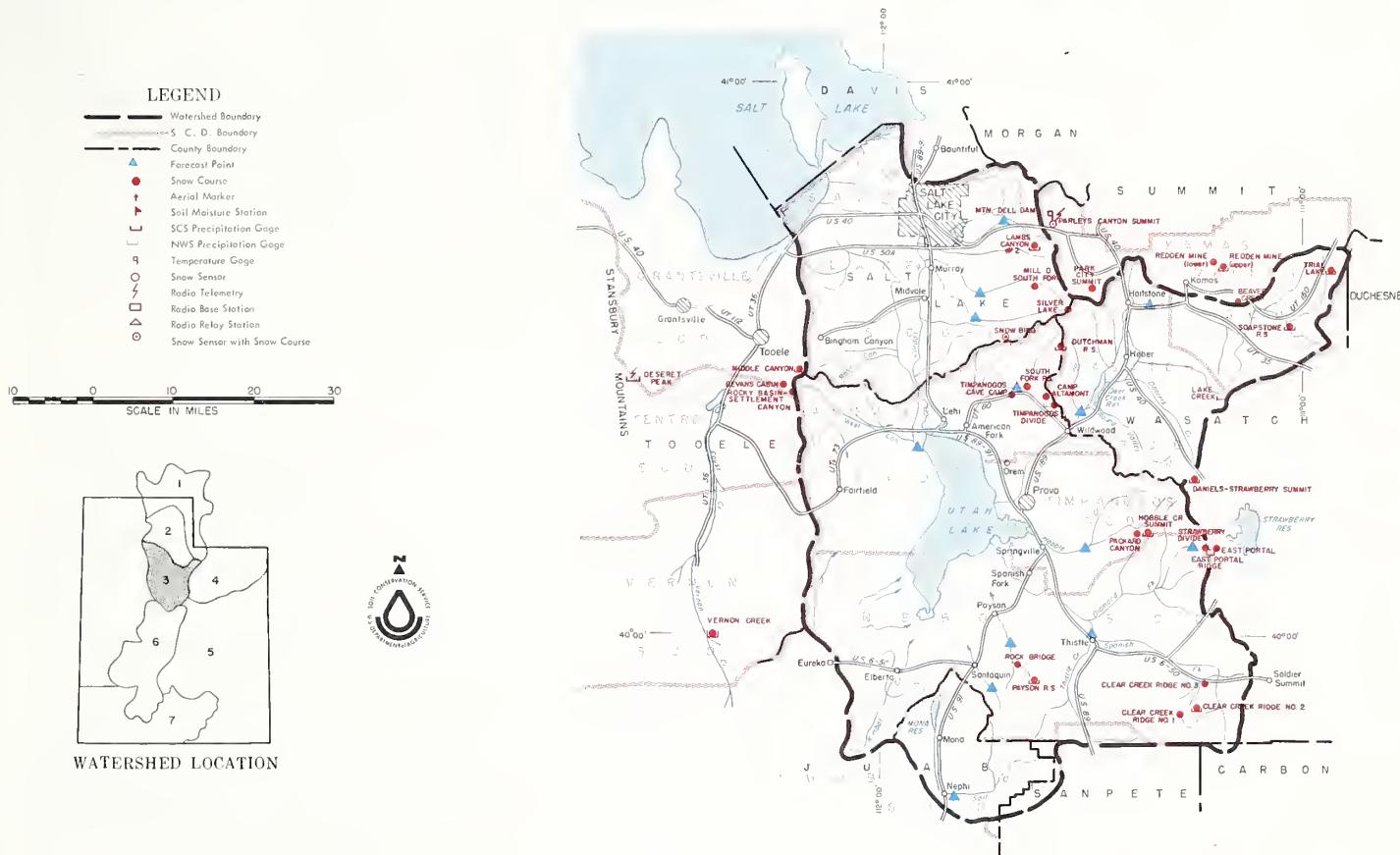
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
OGDEN RIVER							
Ben Lomond Peak a	8000	No Reading	- -	- -	- -	- -	- -
Ben Lomond (lower)	6000	4/25	3.52	4.72*	36.46	28.19*	129
Ben Lomond Trail	6000	4/25	3.64	7.07b	40.69	31.72*	128
Causey Dam	5500	4/26	1.99	2.95b	17.36	- -	- -
Dry Bread Pond	8230	4/27	3.29	4.00*	26.48	23.90*	111
Magpie Flat a	7600	4/27	2.74	- -	24.54	- -	- -
Middle Fork Ogden a	8420	4/27	3.54	- -	33.78	- -	- -
Monte Cristo #2 x	8960	4/27	3.50	5.48b	26.18	30.13b	87
Sagebrush Flat	6300	4/26	1.92	2.63b	18.54	15.99b	116
WEBER RIVER							
Chalk Creek #1 a	9100	No Reading	- -	- -	- -	- -	- -
Chalk Creek #2 a	7900	4/27	2.65	3.32*	24.15	18.28*	132
Chalk Creek #3	7500	4/26	3.56	3.91b	18.17	16.64b	109
Farmington Guard Sta.	7500	4/30	5.63	5.54	38.64	32.30	120
Farmington Rice	7000	4/30	6.62	5.54	40.94	29.92	137
Francis Canyon a	7360	4/27	1.81	- -	18.02	- -	- -
Guilders Peak a	8000	4/27	3.33	- -	24.40	- -	- -
Hardscrabble a	6500	No Reading	- -	- -	- -	- -	- -
Hoodoo Knoll a	8350	4/27	3.38	- -	27.31	- -	- -
Horse Ridge	8260	4/27	- -	- -	26.34	- -	- -
Lost Creek	6125	Not Measured	- -	- -	- -	- -	- -
Mtn. Dell Dam	5500	4/30	1.94	2.88	11.81	14.72	80
Parley's Canyon Smt.	7500	4/27	4.09	4.71*	27.90	24.04*	116
Porcupine	8100	4/27	3.26	- -	21.28	- -	- -
Redden Mine (upper)	9000	4/26	5.38	- -	28.85	- -	- -
Sargent Lake a	8400	4/27	4.54	- -	27.23	- -	- -
Silver Lake (Brighton) x	8725	5/1	5.05	6.58	35.65	30.73	116
Smith & Morehouse	7600	4/27	3.65	3.54*	22.67	19.99*	113
Trial Lake x	9800	4/30	3.96	3.87	31.35	25.05*	125



WATER SUPPLY OUTLOOK

UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

**UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS ABOVE AVERAGE

SNOW COVER on Utah Lake drainage is 186% of the May 1 average. Jordan River tributaries above Salt Lake are 148% and the Oquirrh Mountains above Tooele are 305% of the May 1 average.

PRECIPITATION during April varied from 67% of average at Mountain Dell Dam to 133% at Daniels-Strawberry Summit.

SOIL MOISTURE is above average.

RESERVOIR STORAGE is above average.

STREAMFLOW FORECASTS vary from 110% of the May-July average on the Provo to 300% on Vernon Creek. Maximum mean daily peak flow is expected to be above average.

Vernon Creek produced a peak on May 4, estimated to be about 35-45 cfs. mean daily with an instantaneous peak of about 96 cfs. Other streams off the Oquirrh Mountains are expected to produce much higher than average peaks this season.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year
<u>PROVO RIVER & UTAH LAKE</u>				
American Fork nr American Fork	28	117	May-July	24
Hobble Crk. nr Springville	13.5	134	May-July	10.1
Provo nr Hailstone (6)	90	110	May-July	82
Provo below Deer Crk. Dam (7)	96	110	May-July	87
Spanish Fork at Thistle	32	152	May-July	21
Strawberry Reservoir Inflow (8)	42	137	May-July	31
Utah Lake Inflow	190	141	May-July	135
<u>JORDAN RIVER & SALT LAKE</u>				
Big Cottonwood nr SLC	36	120	May-July	35
Farmington Crk. nr Farmington	8.0	154	May-July	5.6
Little Cottonwood Crk. nr SLC	37	119	May-July	32
Parley's Crk. nr SLC	10.5	145	May-July	12.9
Settlement Canyon nr Tooele	5.2	247	May-July	2.1b
Vernon Creek nr Vernon	1.2	300	May-July	0.4b

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Big Cottonwood Creek near SLC	400 - 550	310
Hobble Creek near Springville	250 - 450	180
Spanish Fork near Thistle	450 - 750	307
Vernon Creek nr Vernon	35 - 45	6

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
Spanish Fork	Strawberry	270.0	190.0	219.4	132.2
Utah Lake	Utah Lake	883.9	874.3	855.5	620.4
Provo	Deer Creek	149.7	125.9	129.0	97.0
(1)	- Observed flow corrected for change in storage and diversions				
x	- Adjacent drainage				
b	- Average of all past records within the 15-year period, but less than 15 years				
*	- Partly estimated				

UTAH LAKE, JORDAN RIVER & TOOELA WATERSHEDS

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
<u>UTAH LAKE</u>						
Beaver Creek R.S.	7500	4/30	4	1.4	0.0	1.1
Camp Altamont	7300	4/27	36	16.2	0.0	4.9
Clear Creek Ridge #1	9200	4/25	60	24.3	13.6	15.2b
Clear Creek Ridge #2	8000	4/25	43	16.2	4.6	7.4b
Clear Creek Ridge #3	6600	4/25	0	0.0	0.0	0.1b
Daniels Strawberry Smt.	8000	4/27	35	14.4	0.0	6.5
Dutchman R.S.	7560	4/27	44	18.9	0.0	8.1b
East Portal	7560	4/26	24	10.5	0.0	10.1b
Hobble Creek Summit	7420	4/26	33	13.5	0.0	5.1b
Packard Canyon	6400	4/27	14	5.3	0.0	0.8b
Payson R.S.	8050	4/24	68	29.3	6.3	11.7b
Rock Bridge	6750	4/24	50	19.7	0.0	3.4b
Soapstone R.S.	7800	4/30	20	7.4	1.5	5.7
Strawberry Divide	8000	4/26	53	21.4	- -	- -
Timpanogos Divide	8140	4/27	64	30.7	14.2	18.4
Trial Lake	9800	4/30	75	26.3	34.8	27.3
<u>JORDAN RIVER & TOOELA VALLEY</u>						
Bevan's Cabin	6450	5/1	46	20.3	3.5	1.7b
Lamb's Canyon	6600	4/27	31	12.8	11.5	6.3
Lamb's Canyon #2	7400	4/27	35	13.8	10.2	- -
Middle Canyon - Tooel	7000	4/30	55	24.3	3.8	6.0b
Mill D. South Fork	7400	4/30	43	18.4	13.4	11.9
Parley's Canyon Smt. x	7500	4/27	44	17.4	15.5	10.4
Rocky Basin-Sttlmt. Canyon	8900	5/2	119	52.7	28.7	24.2b
Silver Lake	8725	4/30	72	30.0	33.6	24.2
Snowbird - Gad Valley	10000	5/4	101	42.4*	15.8*	- -
Vernon Creek	7500	4/30	39	15.7	0.0	- -

"The Conservation of Water begins with the Snow Survey."



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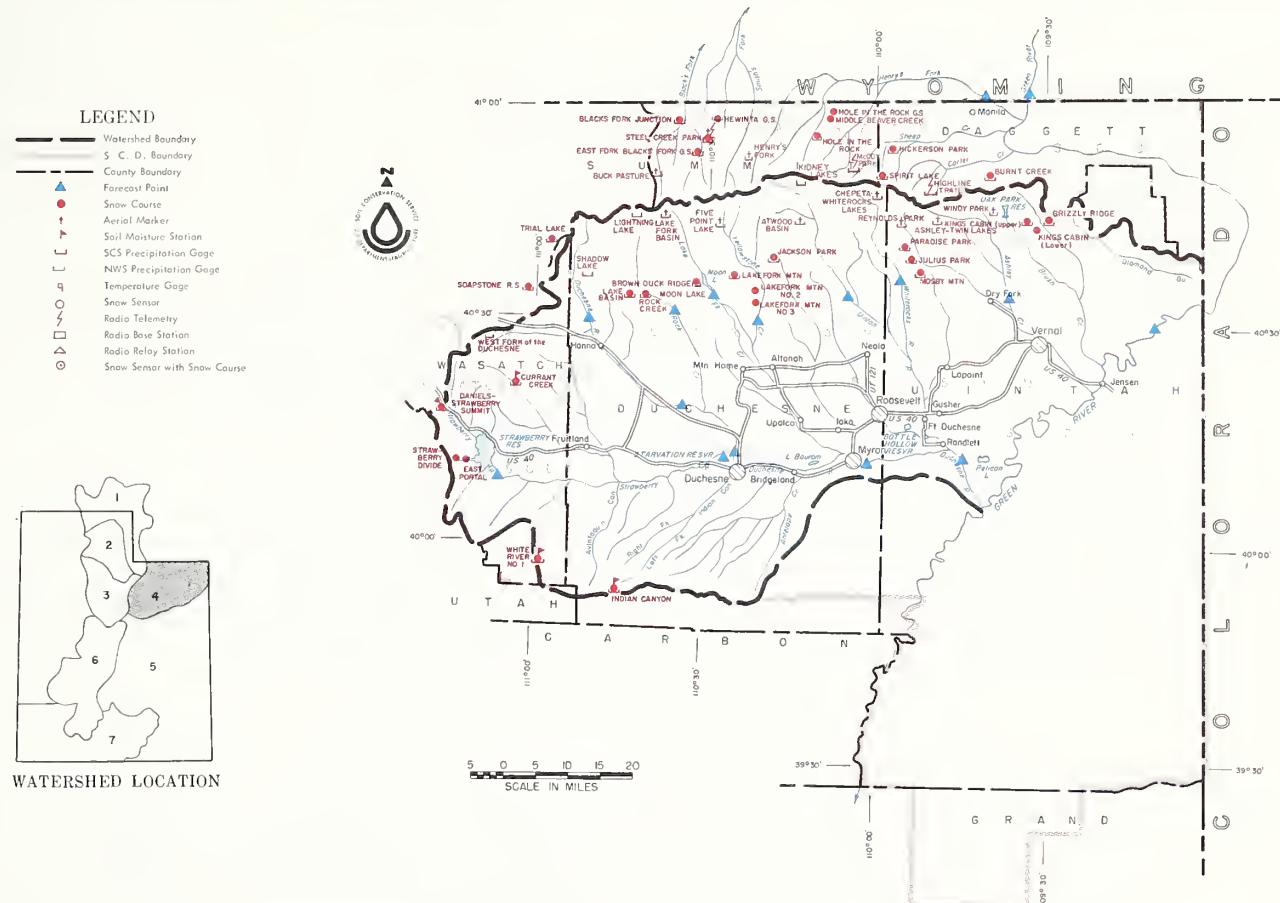
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
<u>UTAH LAKE</u>							
Clear Creek Ridge #2	8000	4/25	3.67	2.97b	22.41	17.29*	130
Daniels-Strawberry Smt.	8000	4/27	3.61	2.72*	26.26	19.83*	132
Dutchman R.S.	7560	4/27	3.75	3.91b	30.73	23.17b	132
East Portal Ridge	7800	4/26	3.17	3.63	22.25	20.53*	108
Hobble Creek Smt.	7420	4/26	2.50	- -	27.48	- -	- -
Payson R.S.	8050	4/24	4.65	3.59b	30.00	20.56	146
Soapstone R.S.	7800	4/30	3.50	2.94*	21.24	17.61*	121
Timpanogos Divide	8200	4/27	3.15	3.69	37.40	27.47	136
Trial Lake	9800	4/30	3.96	3.87	31.35	25.05*	125
<u>JORDAN RIVER & TOOKELE VALLEY</u>							
Lamb's Canyon #2	7400	4/27	3.48	- -	- -	- -	- -
Middle Canyon	7000	Not Measured	4.42b	- -	20.85*	-	-
Mt. Dell Dam	5500	4/30	1.94	2.88	11.81	14.72	80
Parley's Canyon Smt.	7500	4/27	4.09	4.71	27.90	24.04	116
Rocky Basin-Stlmt. Cayn.	8900	5/2	6.47	- -	44.68	- -	- -
Silver Lake (Brighton)	8725	5/1	5.05	6.58	35.65	30.73	116
Vernon Creek	7500	4/30	2.40	- -	27.53	- -	- -
Deseret Peak	9250	4/27	5.21	- -	35.53	- -	- -

WATER SUPPLY OUTLOOK

UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS ABOVE AVERAGE

SNOW COVER ranges from 129% of the May 1 average on the north side of the Uintahs to 190% on the south side. The east end of the Uintahs above Vernal and Dutch John received good increases to the snow pack from month end storms. Normally April melt would have reduced the measurements 2-3 inches of water. Aerial snow depth markers at higher elevations show 4.5 to 7 feet of snow in upper basins which should sustain flows later in the season.

PRECIPITATION ranged from 87% of average at East Portal near Strawberry Reservoir to 204% at Julius Park.

SOIL MOISTURE is above average.

RESERVOIR STORAGE is above average

STREAMFLOW FORECASTS range from 92% of the April-July average for Inflow to Flaming Gorge to 165% of the May-July average for Dry Fork and 157% for Ashley Creek. Maximum mean daily peak flow on Ashley Creek is expected to be between 1200-1800 cfs. and 575-800 cfs. on Dry Fork. The Strawberry at Duchesne is expected to produce a maximum mean daily peak between 800-1100 cfs.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
<u>DUCESNE RIVER</u>				
Duchesne nr Tabiona (1)	113	133	May-July	85
Duchesne at Duchesne (1)	202	130	May-July	155
Duchesne at Myton (1)	264	127	May-July	208
Duchesne at Randlett (1)	285	125	May-July	228
Strawberry at Duchesne	55	138	May-July	40
Rock Crk nr Mtn. Home	98	118	May-July	83
Lakefork below Moon Lake (1)	76	120	May-July	63
Yellowstone nr Altonah	67	120	May-July	56
Uintah nr Neola	98	128	May-July	75
Whiterocks nr Whiterocks	58	120	May-July	46
				48
<u>FLAMING GORGE TO DUCESNE RIVER</u>				
Ashley Crk nr Vernal	68	157	May-July	42
Henry's Fork at Linwood	55	145	Apr-Sept	38
Flaming Gorge Inflow (1)	967	92	Apr-July	1967
Dry Fork at mouth	26	165	May-July	1054
				15.8

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Ashley Creek near Vernal	1200 - 1800	920
Dry Fork at mouth	575 - 800	426b
Strawberry River at Duchesne	800 - 1100	558

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
<u>Ashley Creek</u>	Steinaker	33.3	30.7	24.7	- -
<u>Green River</u>	Flaming Gorge	3749.0	3063.0	2728.0	- -
<u>Lake Fork</u>	Moon Lake	35.8	20.9	15.3	17.5
<u>Strawberry</u>	Starvation	165.3	121.1	127.1	- -
<u>Uintah</u>	Bottle Hollow	11.3	11.0	11.0	- -
(1) - Observed flow corrected for change in storage and diversions					
b-- Average for all past record within 15-year period, but less than 15 years.					
x - Adjacent drainage					
* - Partly estimated					

UNTAH BASIN & DAGGETT SCD'S

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average +
<u>UINTAH BASIN SCD</u>						
Brown Duck Ridge	10800	4/25	73	22.8	- -	- -
Currant Creek	7800	5/1	11	3.6	0.0	1.3b
Daniels Strawberry Smt.	8000	4/27	35	14.4	0.0	6.5
Grizzly Ridge	8500	4/19	66	16.2	3.2	- -
Indian Canyon	9100	4/20	56	17.4	9.6	7.8*
Julius Park	9800	4/20	71	20.2	16.9	11.8b
King's Cabin (lower)	8600	4/19	60	14.6	4.8	4.7
King's Cabin (upper)	8730	4/19	65	16.1	9.7	7.0
Lakefork Mountain	10200	4/26	54	16.4	11.4	10.8
Lakefork Mountain #2	8900	4/26	32	9.1	0.0	3.0b
Lakefork Mountain #3	8100	4/26	21	6.9	0.0	0.7b
Mosby Mountain	9500	4/20	59	14.8	9.7	9.0b
Paradise Park	10100	4/20	66	18.6	17.3	11.6b
Rock Creek	7900	4/30	11	3.2	0.0	0.8b
Soapstone R.S. x	7800	4/30	20	7.4	1.5	5.7
Trial Lake x	9800	4/30	75	26.3	34.8	27.3
White River #1	8550	4/26	43	14.5	6.4	7.4*
<u>DAGGETT SCD</u>						
Black's Fork Jct.	8925	4/24	34	10.4	11.5	7.9b
Burnt Creek	7900	4/30	28	8.6	0.0	- -
E. Fk. Black's Fork G.S.	9300	4/24	40	12.3	13.1	9.7b
Hewinta Guard Station	9500	4/24	41	12.3	11.6	9.9b
Hickerson Park	9100	4/23	44	11.4	3.4	- -
Spirit Lake	10300	4/23	76	23.6	18.1	14.4b
Steel Creek Park	9900	4/24	65	18.2	23.6	17.7b
<u>UINTAH BASIN - Aerial Markers</u>						
Ashley Twin Lakes A	10500	4/26	77	20.8	21.4	- -
Atwood Basin A	10250	4/26	51	14.3	12.5	- -
Buck Pasture A	9700	4/26	60	18.0	21.0	- -
Chepeta-Whiterocks Lakes A	10300	4/26	74	20.0	18.8	- -
Five Point Lake A	11000	4/26	69	21.4	21.0	- -
Henry's Fork A	10000	4/26	66	19.8	19.2	- -
Lakefork Basin A	11100	4/26	72	22.3	25.0	- -
Reynolds Park A	10400	4/26	84	23.5	19.1	- -
Windy Park A	9400	4/26	76	19.0	12.0	- -

"The Conservation of Water begins with the Snow Survey"

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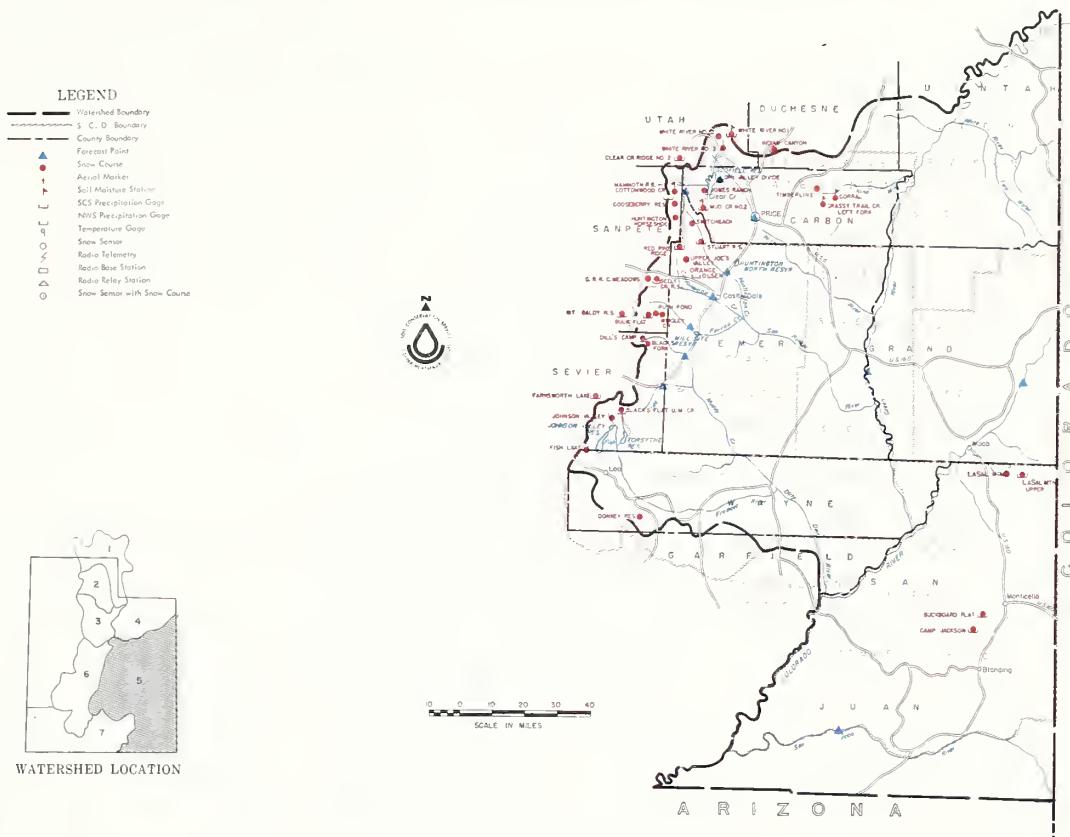
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
<u>UINTAH BASIN SCD</u>							
Currant Creek	7800	5/1	2.40	2.26b	19.58	14.61b	134
Daniels-Strawberry Smt.x	8000	4/27	3.61	2.72*	26.26	19.83*	132
East Portal Ridge x	7800	4/26	3.17	3.63	22.25	20.53*	108
Grizzly Ridge	8500	4/30	7.88	- -	26.77	- -	- -
Indian Canyon	9100	4/20	3.74	2.35b	23.79	15.41b	154
Julius Park	9800	4/20	6.10	2.99b	23.74	14.23*	167
King's Cabin (upper)	8730	4/19	5.25	2.84	22.27	12.88*	173
Lakefork Mountain	10200	4/26	3.22	2.55*	21.39	13.64*	157
Moon Lake	8150	5/1	1.65	1.47	15.30	9.01	170
Mosby Mountain	9500	4/20	6.59	- -	22.66	- -	- -
Paradise Park	10100	4/20	5.45	2.98b	23.96	15.52*	154
Rock Creek	7900	4/30	3.12	2.14b	19.60	12.56b	156
Soapstone R.S. x	7800	4/30	3.50	2.94*	21.24	17.61*	121
Trial Lake x	9800	4/30	3.96	3.87	31.35	25.05*	125
White River #1 x	8550	4/26	3.99	2.61b	19.11	15.59*	122
<u>DAGGETT SCD</u>							
Black's Fork Jct.	8925	4/24	3.80	2.75b	14.52	13.08b	111
Burnt Creek	7900	4/30	6.20	- -	19.38	- -	- -
East Fk. Black's Fk G.S.	9300	4/24	4.10	2.95b	15.80	14.01b	113
Hewinta Guard Station	9500	4/24	4.52	3.18b	16.61	14.95b	111
Hickerson Park	9100	4/23	- -	- -	16.52	- -	- -
Spirit Lake	10300	4/23	8.09	4.35b	26.85	18.33*	146
Steel Creek Park	9900	4/27	4.49	- -	18.33	- -	- -

WATER SUPPLY OUTLOOK

CARBON, EMERY, GRAND and SAN JUAN COUNTIES in UTAH

**UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS ABOVE AVERAGE

SNOW COVER as of May 1 varies from 1.5 times average on the San Rafael to almost 5 times average on the Blue Mountains near Monticello. Cool weather in April reduced snow melt.

PRECIPITATION during April ranged from about half average at Widtsoe Summit to almost twice average at LaSal Mountain upper near Moab.

SOIL MOISTURE on the watersheds is still above average. Some lower elevations are beginning to lose moisture.

RESERVOIR STORAGE is near the May 1 average in Scofield, although less than last May 1. Other reservoirs in the area have good storage and are expected to fill this season.

STREAMFLOW FORECASTS range from 125% of the May-July average on Huntington Crk. to 184% on Mill Creek near Moab. The delay in snow melt during April has resulted in increases to most forecasts in the area. Maximum mean daily peak flow on Furon Creek is expected to range between 450 - 650 cfs and on Muddy Creek - 175-300 cfs.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
PRICE RIVER				
Gooseberry Crk. nr Scofield	12.0	132	May-July	9.1
Price nr Hiener (1)	61	143	May-July	43
Scofield Reservoir Inflow (1)	40	148	May-July	13.9
SAN RAFAEL RIVER				
Cottonwood Crk. nr Orangeville	53	129	May-July	41
Ferron Crk. nr Ferron	40	129	May-July	31
Huntington Crk. nr Huntington	48	125	May-July	38
MUDDY RIVER				
Muddy Creek nr Emery	20	138	May-July	14.5
FREMONT RIVER				
Seven Mile Crk. nr Fish Lake	9.0	145	Apr-July	6.2b
UPPER COLORADO BASIN				
Colorado nr Cisco, Utah	4255	152	Apr-July	1594
Green at Green River, Utah	2747	107	Apr-July	2030
Navajo Reservoir Inflow	1050	170	Apr-July	259
San Juan nr Bluff, Utah	1532	172	Apr-July	276
Mill Creek nr Moab	7.0	184	May-July	890
				3.8

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Ferron Creek nr Ferron	450 - 650	414
Muddy Creek near Emery	175 - 300	142

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
Price River	Scofield	65.8	26.3	49.0	26.4
San Rafael	Joe's Valley	54.6	39.3	42.7	- -
	Mill Site	16.7	6.2	6.8	- -
	Huntington North	3.9	3.9	2.8	- -
San Juan	Navajo	1696.4	1174.3	846.8	- -
(1)	- Observed flow corrected for change in storage and diversions				
b	- Average for all past record within 15-year period, but less than 15 years.				
x	- Adjacent drainage				
*	- Partly estimated				

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN COUNTIES

SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD	
NAME	Elevation		Snow Depth (Inches)	Water Content (Inches)	Last Year	Average †
<u>PRICE RIVER</u>						
Dry Valley Divide	7800	4/30	21	8.2	0.0	3.9b
Gooseberry Reservoir	8700	4/26	59	24.0	8.6	16.1b
Indian Canyon x	9100	4/20	56	17.4	9.6	7.8*
Jones Ranch	7600	4/30	6	1.7	0.0	4.9b
Mammoth R.S. Ctwd. Crk. x	8800	4/26	59	23.8	9.2	16.1b
Mud Creek #2	8300	4/30	31	11.6	0.0	7.4b
White River #1	8550	4/26	43	14.5	6.4	7.4*
White River #2	7600	4/26	15	5.8	0.0	1.0b
White River #3	7400	4/26	11	4.0	0.0	0.2b
<u>SAN RAFAEL RIVER</u>						
Buck Flat	9400	4/25	56	20.0	7.9	15.6b
Gooseberry Reservoir x	8700	4/26	59	24.0	8.6	16.1b
Orange Olsen	7300	4/26	0	0.0	0.0	- -
Red Pine Ridge	9400	4/26	50	18.2	6.8	14.1b
Rush Pond	9800	4/25	46	15.1	4.6	11.1b
Seely Creek R.S.	10000	5/1	74	24.6	10.8	15.6b
Stuart R.S.	7950	4/30	16	4.4	0.0	1.0b
Upper Joe's Valley	8900	4/26	26	9.1	0.0	4.9b
Wrigley Creek	9000	4/25	38	12.4	0.5	6.5b
<u>FREMONT RIVER</u>						
Black's Flat-U.M. Creek	9250	4/25	40	14.2	2.0	7.7b
Farnsworth Lake x	9900	4/27	80	30.6	16.2	18.8b
Fish Lake	8700	4/25	34	12.6	0.0	2.0b
Johnson Valley	8850	4/25	29	11.0	0.0	2.2b
Mt. Baldy R.S. x	9500	4/25	84	31.2	17.0	22.9
<u>SOUTHEASTERN UTAH DRAINAGES</u>						
Buckboard Flat	9000	4/24	52	20.6	0.0	5.2b
Camp Jackson	8600	4/24	48	19.6	0.0	2.9b
LaSal Mountain	8800	4/25	39	14.8	0.0	1.5b
LaSal Mountain (upper)	9400	4/25	64	22.3	1.9	10.4b

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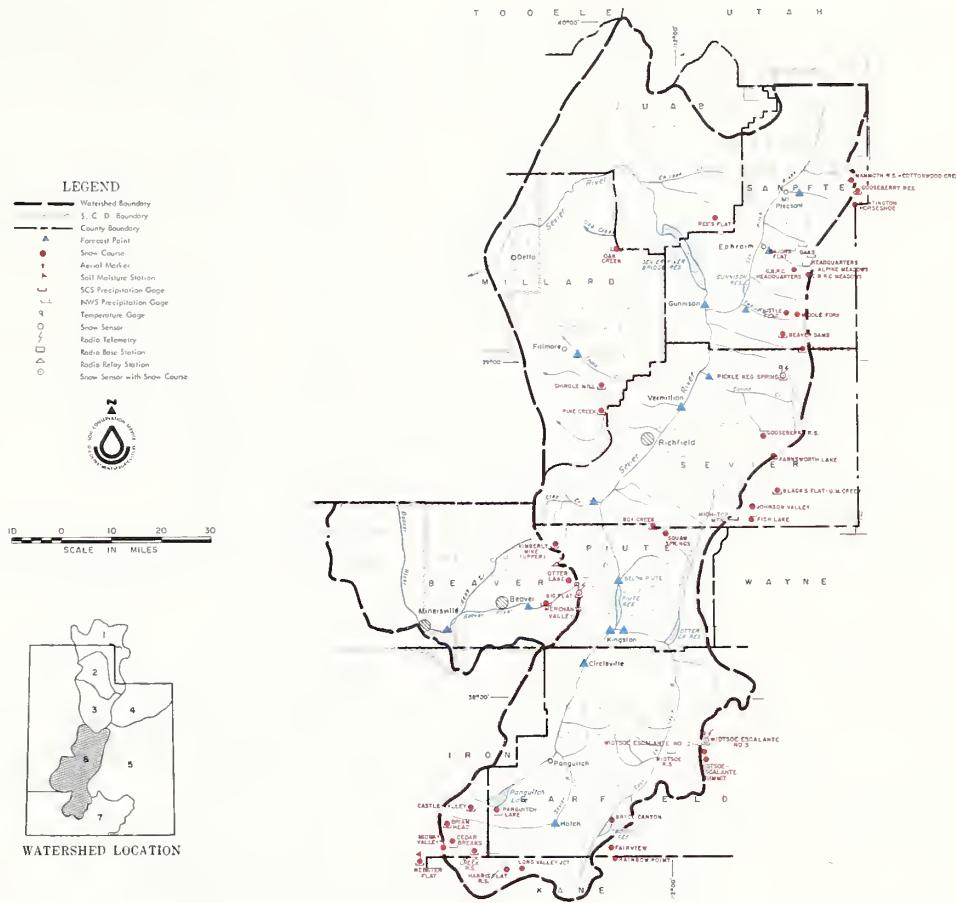
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
<u>PRICE RIVER</u>							
Clear Creek Ridge #2	8000	4/25	3.67	2.97b	22.41	17.29*	130
Gooseberry Reservoir	8700	4/26	3.70	3.36*	27.60	20.63*	134
Indian Canyon	9100	4/20	3.74	2.35b	23.79	15.41b	154
Mammoth R.S. #2	8600	4/26	3.94	3.52b	27.94	21.75*	128
Mud Creek	8300	4/30	3.99	2.52*	24.19	16.82*	144
White River #1	8550	4/26	3.99	2.61b	19.11	15.59*	122
<u>SAN RAFAEL RIVER</u>							
Buck Flat	9400	4/25	3.45	3.22b	24.15	19.37*	125
G.B.R.C. Meadows x	10000	5/1	6.50	4.06	27.70	25.09	110
Gooseberry Reservoir x	8700	4/26	3.70	3.36*	27.60	20.63*	134
Orange Olsen	7300	4/26	1.55	- -	12.45	- -	- -
Red Pine Ridge	9400	4/26	4.40	3.64b	26.65	22.62*	118
Stuart R.S.	7950	4/30	2.80	2.15b	17.40	13.36*	130
<u>FREMONT RIVER</u>							
Black's Flat-U.M. Creek	9250	4/25	3.68	2.54b	18.72	14.34*	130
Farnsworth Lake x	9900	4/27	4.75	4.21*	31.44	22.36b	141
Fish Lake	8700	4/25	2.47	1.93b	14.70	10.04b	146
Widtsoe-Escalante #3 x	9500	4/27	1.30	2.75*	25.58	15.19b	168
<u>SOUTHEASTERN UTAH DRAINAGES</u>							
Buckboard Flat	9000	4/24	3.50	2.94b	43.17	19.86b	217
Camp Jackson	8600	4/24	3.66	2.28*	39.68	16.59*	239
LaSal Mountain (upper)	9400	4/25	4.15	2.30b	28.34	16.86*	168

WATER SUPPLY OUTLOOK

SEVIER RIVER BASIN including BEAVER RIVER in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS EXCELLENT

SNOW COVER is 243% of the May 1 average on the Upper Sevier and 181% on the Lower Sevier. The Beaver River is now 181% of average. Cooler than average April temperatures delayed snow melt and allowed increases to the snow pack at many locations on the watershed.

PRECIPITATION varied from 26% of average at Duck Creek to 204% of average at Beaver Dams.

SOIL MOISTURE is above average.

RESERVOIR STORAGE in Sevier river reservoirs is 165% of average. Minersville is 144% of the May 1 average.

STREAMFLOW FORECASTS range from 135% of the May-July average on Ephraim Creek to 390% on the East Fork of the Sevier. Maximum mean daily peak flows are expected to be as high as three times average on some streams in the area due to heavy low and medium elevation snow and delayed melt.

Report prepared by
BOB L. WHALEY

U.S. DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
FEDERAL BLDG. ROOM 4012 - SALT LAKE CITY, UTAH 84111

MAY 1, 1973

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year
SEVIER RIVER				
Chalk Creek nr Fillmore	24	233	May-July	10.4
Clear Crk nr Sevier (abv. Div.)	18.6	177	May-July	10.5b
East Fork Sevier nr Kingston (9)	25	390	May-July	6.4
Antimony Crk nr Antimony	10.6	180	May-July	5.9b
Inflow				
Kingston to Vermillion Dam	65	217	Apr-June	30 b
Vermillion Dam to Gunnison	35	135	May-June	26
Salina Crk at Salina (10)	14.7	293	May-June	5.0*
Sevier nr Circleville	59	296	May-July	20
Sevier nr Gunnison	45	209	May-July	21.9
Sevier at Hatch	60	222	May-July	27
Sevier nr Kingston	30	275	May-July	10.7
Sevier below Piute Dam (11)	50	345	May-July	14.5
SAN PITCH RIVER				
Ephraim Crk nr Ephraim	17.8	135	May-July	13.2b
Pleasant Crk nr Mt. Pleasant	10.0	147	May-July	6.8b
BEAVER RIVER				
Beaver nr Beaver	25	152	May-July	6.4
Minersville Reservoir Inflow (12)	6.5	151	May-June	4.3

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Creek nr Sevier (above div.)	5	Aug. 4	July 19
Salina Creek at Salina	25	June 16	June 10
Sevier at Circleville (Circle Valley)	90	July 18	June 24
Sevier at Hatch (upper)	100	Aug. 10	July 10

PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecast For This Year	Average Percent Delivered During 15 year Period +	Forecast	Period
<u>Sevier River</u>				
Below Vermillion Dam	67	58		Apr-Sept
Circle Valley	90	66		Apr-Sept
Panguitch Valley	100	84		Apr-Sept
Sevier Valley	60	40		Apr-Sept

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)		
	Forecast Range	Average	+
Sevier at Hatch	575 - 820	370	
Sevier at Circleville	550 - 750	292	
Sevier at Kingston	500 - 700	223	
Beaver River near Beaver	350 - 550	215	
Clear Creek near Sevier	220 - 260	156b	
Salina Creek at Salina	325 - 425	133*	

SEVIER RIVER BASIN INCLUDING BEAVER RIVER

SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD		
NAME	Elevation		Snow Depth (Inches)	Water Content (Inches)	Last Year	Average +	
UPPER SEVIER RIVER							
(South of Richfield, Utah)							
Big Flat x	10290	4/24	78	27.6	13.7	17.8	
Box Creek	9800	4/26	51	16.4	2.2	10.2b	
Castle Valley	9700	4/26	49	19.4	0.0	6.7b	
Duck Creek R.S.	8700	4/30	44	17.4	0.0	4.6	
Fish Lake	8700	4/25	34	12.6	0.0	2.0b	
Harris Flat R.S.	7700	4/30	13	5.8	0.0	0.7	
Kimberly Mine	9300	4/25	66	26.9	1.2	12.8b	
Long Valley Jct.	7500	4/30	0	0.0	0.0	0.1b	
Midway Valley	9800	4/25	89	34.8	17.2	19.7b	
Panguitch Lake	8200	4/26	21	7.4	0.0	0.1	
Squaw Springs	9300	4/26	29	10.7	0.0	2.6b	
Widtsoe-Escalante	9500	4/27	32	11.4	0.0	2.6	
Widtsoe-Escalante #2	9500	4/27	43	14.8	0.5	5.3	
Widtsoe-Escalante #3	9500	4/27	53	17.6	2.4	7.4b	
LOWER SEVIER RIVER							
(Including San Pitch)							
Beaver Dams	8000	4/25	38	14.9	0.0	5.8	
Farnsworth Lake	9900	4/27	80	30.6	16.2	18.8	
G.B.R.C. Headquarters	8700	5/1	62	22.2	7.8	13.5	
G.B.R.C. Meadows	10000	5/1	86	32.3	19.2	26.3	
Gooseberry R.S.	8400	4/27	49	19.3	1.2	6.9	
Gooseberry Reservoir x	8700	4/26	59	24.0	8.6	16.1b	
Mammoth R.S. - Ctnwd. Crk	8800	4/26	59	23.8	9.2	16.1b	
Mt. Baldy R.S.	9500	4/25	84	31.2	17.0	22.9	
Oak Creek	7760	5/2	47	18.5	0.0	- -	
Pickle Keg Springs	9600	4/24	59	20.8	4.4	- -	
Pine Creek	8700	5/1	72	30.6	1.7	11.0b	
Shingle Mill	6200	5/1	37	15.5	0.0	0.8b	
BEAVER RIVER							
Big Flat	10290	4/24	78	27.6	13.7	17.8	
Merchant Valley	8200	4/24	41	15.2	0.0	2.8	
Otter Lake	9300	4/24	62	22.6	6.1	12.2	

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
<u>Sevier River</u>	Gunnison	18.2	18.1	14.4	- -
	Otter Creek	52.5	43.5	39.7	31.4
	Piute	71.8	60.1	58.2	35.0
	Sevier Bridge	236.0	162.1	172.7	94.6
<u>Beaver River</u>	Minersville	23.3	16.3	16.3	11.3

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PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
Beaver Dams	8000	4/25	5.55	2.72b	23.81	17.04*	140
Big Flat x	10290	4/24	2.72	3.30*	27.56	18.82*	146
Box Creek	9800	4/26	3.37	2.86b	23.20	16.06b	144
Castle Valley	9700	4/26	3.51	3.60b	26.48	18.09b	146
Duck Creek R.S.	8700	4/30	0.80	3.10	33.35	19.75*	169
Farnsworth Lake	9900	4/27	4.75	4.21*	31.44	22.36b	141
Fish Lake	8700	4/25	2.47	1.93b	14.70	10.04b	146
G.B.R.C. Headquarters	8700	5/1	5.00	3.78	23.35	21.35	109
G.B.R.C. Meadows	10000	5/1	6.50	4.06	27.70	25.09	110
G.B.R.C. Oaks	7655	4/30	5.00	2.58	21.50	14.63	147
Gooseberry R.S.	7800	4/27	3.65	2.50*	23.91	15.09*	158
Gooseberry Reservoir x	8700	4/26	3.70	3.36*	27.60	20.63*	134
Kimberly Mine	9300	4/25	5.80	4.21*	32.20	21.33*	151
Mammoth R.S. #2 x	8600	4/26	3.94	3.52b	27.94	21.75*	128
Mt. Baldy	9500	4/25	5.75	3.49b	27.95	19.34*	144
Oak Creek	7760	5/2	- -	- -	27.23	- -	- -
Panguitch Lake	8200	4/26	1.40	1.32b	15.58	8.12b	192
Pickle Keg Springs	9600	5/1	5.50	- -	27.50	- -	- -
Pine Creek	8700	5/1	4.81	4.8b	45.36	26.54b	171
Shingle Mill	6200	5/1	3.04	2.79b	29.70	16.54*	180
Webster Flat x	9200	4/25	2.95	4.05	31.53	22.00*	143
Widtsoe-Escalante #3	9500	4/27	1.30	2.75*	25.58	15.19b	168
Widtsoe R.S.	7600	4/27	0.88	0.82	9.35	5.37	174
Midway Valley	9800	4/25	1.60	- -	29.45	- -	- -
Beaver Canyon P.H.	7275	4/30	2.49	2.10	17.12	- -	- -
Big Flat	10290	4/24	2.72	3.30*	27.56	18.82*	146
Merchant's Valley	8650	4/24	3.34	- -	24.05	- -	- -

WATER SUPPLY OUTLOOK

EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

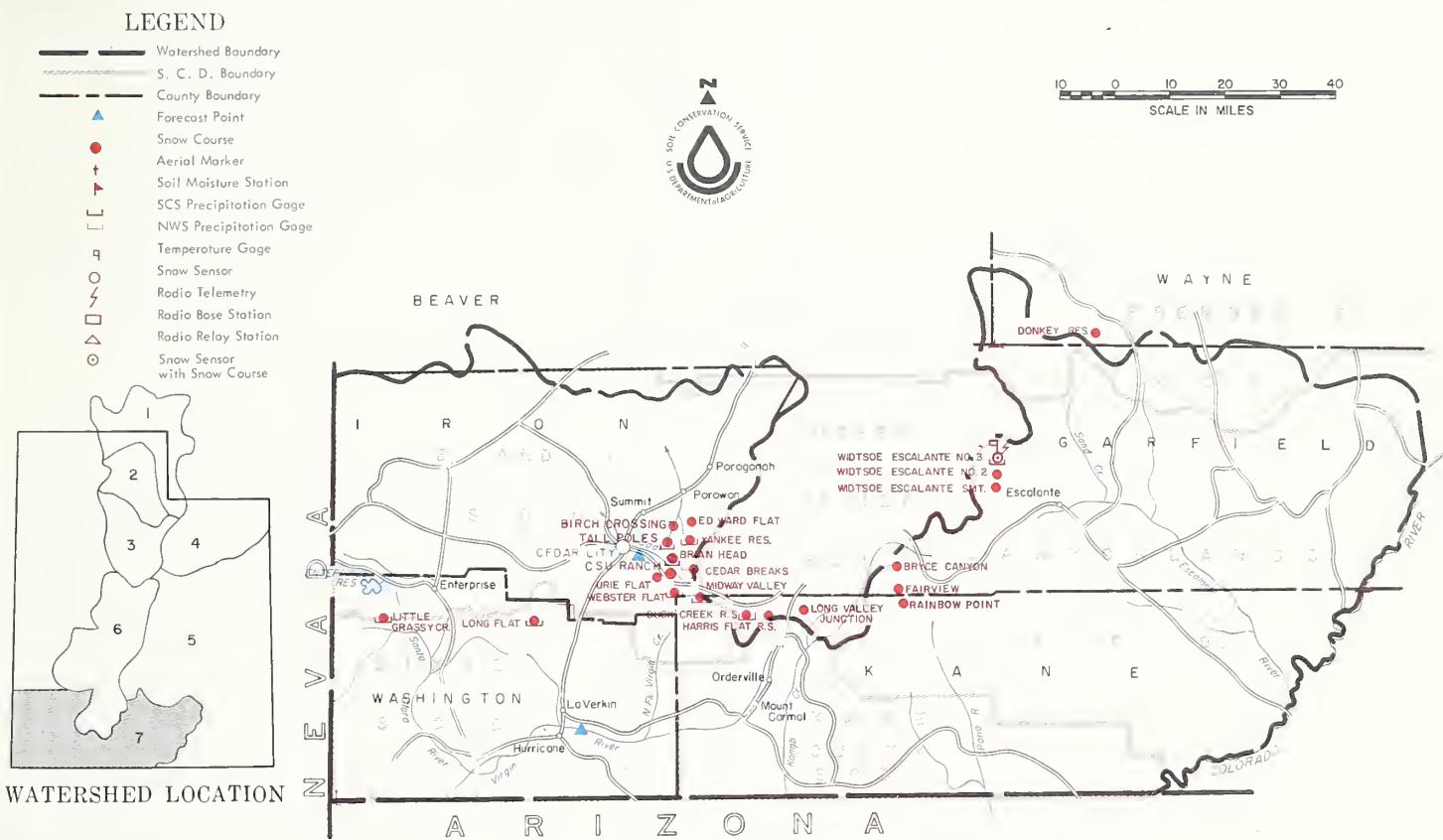
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UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS**

LEGEND

-  Watershed Boundary
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-  County Boundary
-  Forecast Point
-  Snow Course
-  Aerial Marker
-  Soil Moisture Station
-  SCS Precipitation Gage
-  NWS Precipitation Gage
-  Temperature Gage
-  Snow Sensor
-  Radio Telemetry
-  Radio Base Station
-  Radio Relay Station
-  Snow Sensor with Snow Course



10 0 10 20 30 40
SCALE IN MILES



MAY 1, 1973

THE WATER SUPPLY OUTLOOK IS EXCELLENT

SNOW COVER is still extremely heavy as a result of colder than average temperatures holding back normal April melt. The Virgin River, Coal Creek and Escalante watersheds still had almost 3 times the normal May 1 snow cover. Parawan Creek was better than 4.5 times the May 1 average and the Enterprise-New Harmony area still had a total of 21.5 inches of water at Little Grassy and Long Flat. They usually have less than one-half inch of water on May 1.

PRECIPITATION for April varied from 25% of average at Duck Creek Ranger Station to 112% at Yankee Reservoir. Soil Moisture is above average.

RESERVOIR STORAGE in Lake Powell is now 45% of capacity. Smaller reservoirs in the area are reported full and spilling as the heavy snow melt runoff begins.

STREAMFLOW FORECASTS range from 137% of the April-July average for Lake Powell Inflow to 583% of the May-June average for the Santa Clara at Pine Valley. The Virgin River is expected to produce 295% of the May-June average and Coal Creek 238% of the May-July average. Maximum mean daily peak flow on the Virgin is expected to be between 1270-1755 cfs and Coal Creek is expected to be between 415-685 cfs. Other streams in this area can also expect much higher than average peak flows.

Report prepared by
BOB L. WHALEY

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year
<u>VIRGIN RIVER</u>				
Virgin nr Virgin	65	295	May-June	22
Santa Clara nr Pine Valley	14.0	583	May-June	2.4
Santa Clara nr Gunlock	20.0	571	May-June	3.5*
<u>COAL CREEK</u>				
Coal Crk nr Cedar City	26	238	May-July	10.9
<u>UPPER COLORADO BASIN</u>				
Lake Powell Inflow	8923	137	Apr-July	6527

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Coal Creek	415 - 685	217
Virgin River	1270 - 1755	557

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
<u>Colorado</u>	Lake Powell	25002.0	11251.0	13224.0	- -
b - Average for all past record within 15 year period, but less than 15 years.					
x - Adjacent Drainage					
* - Partly estimated					

EAST GARFIELD, KANE, WASHINGTON & IRON

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Average +
<u>ESCALANTE RIVER</u>						
Widtsoe-Escalante Smt.	9500	4/27	32	11.4	0.0	2.6
Widtsoe-Escalante #2	9500	4/27	43	14.8	0.5	5.3
Widtsoe-Escalante #3	9500	4/27	53	17.6	2.4	7.4b
<u>VIRGIN RIVER & COAL CREEK</u>						
CSU Ranch	8200	4/24	30	12.0	0.0	- -
Duck Creek R.S.	8700	4/30	44	17.4	0.0	4.6
Harris Flat x	7000	4/30	13	5.8	0.0	0.7
Midway Valley x	9800	4/25	89	34.8	17.2	19.7b
Urie Flat	8450	4/25	35	13.8	0.0	1.3b
Webster Flat	9200	4/25	69	28.9	0.0	8.9
<u>PAROWAN CREEK</u>						
Birch Crossing	8100	4/24	36	12.3	0.0	- -
Brian Head	10000	4/24	90	34.1	15.5	- -
Ed Ward Flat	8300	4/24	43	15.0	0.0	1.7b
Tall Poles	8800	4/24	65	24.5	5.8	- -
Yankee Reservoir	8700	4/24	53	19.1	0.0	5.6b
<u>ENTERPRISE TO NEW HARMONY DRAINAGES</u>						
Little Grassy Creek	6100	4/25	8	3.4	0.0	0.0b
Long Flat	8000	4/26	37	18.1	0.0	0.4b

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U. S. Department of Interior
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Geological Survey
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Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

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Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

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